

SCOPE TRACKING - ADDITIONAL WORK (TAW) - 16220

SDD108A; 4Q2011 4 CRUDE MAJOR-EASTSIDE

Scope Creep Type

- ☐ Late (Deliverables supplied late)
☐ Cancel (cancel existing job after WL Frz)
☐ TAW Pre-ER Discovery
☐ Scope Reduction Pre-ER
☐ Scope Addition Pre-ER

- ☒ TAW Post-ER Discovery
☐ Scope Reduction Post-ER
☐ Scope Addition Post-ER
☐ Work Deferral
☐ Other (work done outside of TA)

Approval Status

- ☐ NEW
☒ ESTIMATING
☐ UNDECIDED
☐ APPROVED
☐ DENY

Date: 10/26/2011 **WO Nbr:** 238172
Originator: BEAUREGARD, JOHN (tbea) RI

Remarks: approved MRG 10/28

Engineering Required

- ☒ Yes ☐ No

Environmental Review

- ☐ Yes ☒ No

Risk Assessment?

- ☐ Yes ☒ No

T/A Interval (Mos):

System No:

ER Submission Date:

Equip / Loc: (D) P-1148

Description of work: (Include Options)

BE-102-E9 / P-1148 discharge gate valve
Replace discharge valve

Information:

P-1148 8 inch gate valve gasket mating surface is misaligned at the gate valve to check valve interface. The valve condition leads our Chevron maintenance team to believe we could start up with bonnet issues on this valve. The bonnet on the P-1148A gate valve the similar valve required a routine maintenance following thermal shock while switching pumps on the run. This valve was in similar condition to the current valve on P-1148.

DED INSTRUCTIONS:

SEE ATTACHED WORK INSTRUCTIONS

Justification for this TAW

we are replacing the piping at this location and this is a good opportunity to replace this valve. We will save ourselves time and money down the road. P-1148 discharge valve will likely require maintenance on the run according to the routine maintenance team following an in plant inspection.

Reason work was identified after work list freeze or late:

Work List Freeze Date:

during discovery

Schedule Status (for use by schedulers):

Current Estimates:

Labor	\$0
Material	\$0
Equip.	\$0
Total:	\$0

Summary Info:

ER Contingency:	\$0
TAW Estimates at ER Creation:	\$1,549,373
Current TAW Estimate:	\$0
TAW \$ Approved to Date:	\$1,616,905
Remaining Contingency:	(\$1,616,905)

Effect on Schedule

- ☒ None
☐ Risk, Miss Planning Milestone
☐ Risk, number of non-critical path jobs
☐ Potential critical path
☐ New critical path
☐ Extends Schedule by 0

Planning Notes:

Impacts Budget?

- ☐ Yes ☒ No ☐ Capital ☐ Expense

10/28/2011 10:50:59 AM

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Approvals: Select Added Work Classification and Type To Show Required Approvals...

	Req?	Core Team Members:	Status	Date:	NOT SUBMITTED
Operations:	Y	CRUZ, ALFRED (acrz) RI	10/28/11	<i>[Signature]</i>	
Technical:	Y	MURPHY, PAT (pmgr) RI	10/28/11	<i>[Signature]</i>	
Inspection:	Y	BEAUREGARD, JOHN (tbea) RI	10/28/11	<i>[Signature]</i>	
Maint. Core Team Lead:	Y	MASSARO, VINCENT (vrma) RI	10/28/11	<i>[Signature]</i>	
Management Approvals:					
Impact Team Leader:	Y	GREENFIELD, MATTHEW (mgcv) RI	10/28/11	<i>[Signature]</i>	
TA Superintendent:	N				
Section Head:	N				
Area Business Mgr:	N				
Mgr Of Operations:	N				

Approval Process Comments

CommentDate	Comment	UserEntered
10/28/2011 10:49:11 AM	EWO ATTACHED AND GIVEN TO IMPACT	MURPHY, PAT (pmgr) RI

Entered By: **TBEA** 10/26/2011 1:32:00 PM Last Updated By: **PMGR** 10/28/2011 10:50:52 AM

R. RAMIREZ

OCT 28 2011

10/28/2011 10:51:00 AM

1.0 SCOPE

A Gate Valve on the discharge side of P-1148 needs to be replaced. This EWO provides specific work direction for this valve.

2.0 GENERAL REQUIREMENTS

All work in this EWO shall be in strict compliance with the following ASME Codes and Richmond Refinery standards:

- ASME Section VIII (latest): _____ Pressure Vessel Code
- NBIC (latest): _____ National Board Inspection Code
- ASME Section IX (latest): _____ Welding and Brazing Qualifications
- ASME Section V (latest): _____ Nondestructive Examination
- All piping work in this EWO shall be in compliance with the “Richmond Refinery Metals Craft Manual”. The piping Contractor is responsible for complying with these quality assurance procedures.
- Any repair alternatives to the instructions in this EWO shall be reviewed and approved by a Chevron Designs Engineer.

3.0 MATERIALS

- Obtain Valves from MR# 238172
- All other materials to be supplied by Maintenance and/or the Contractor

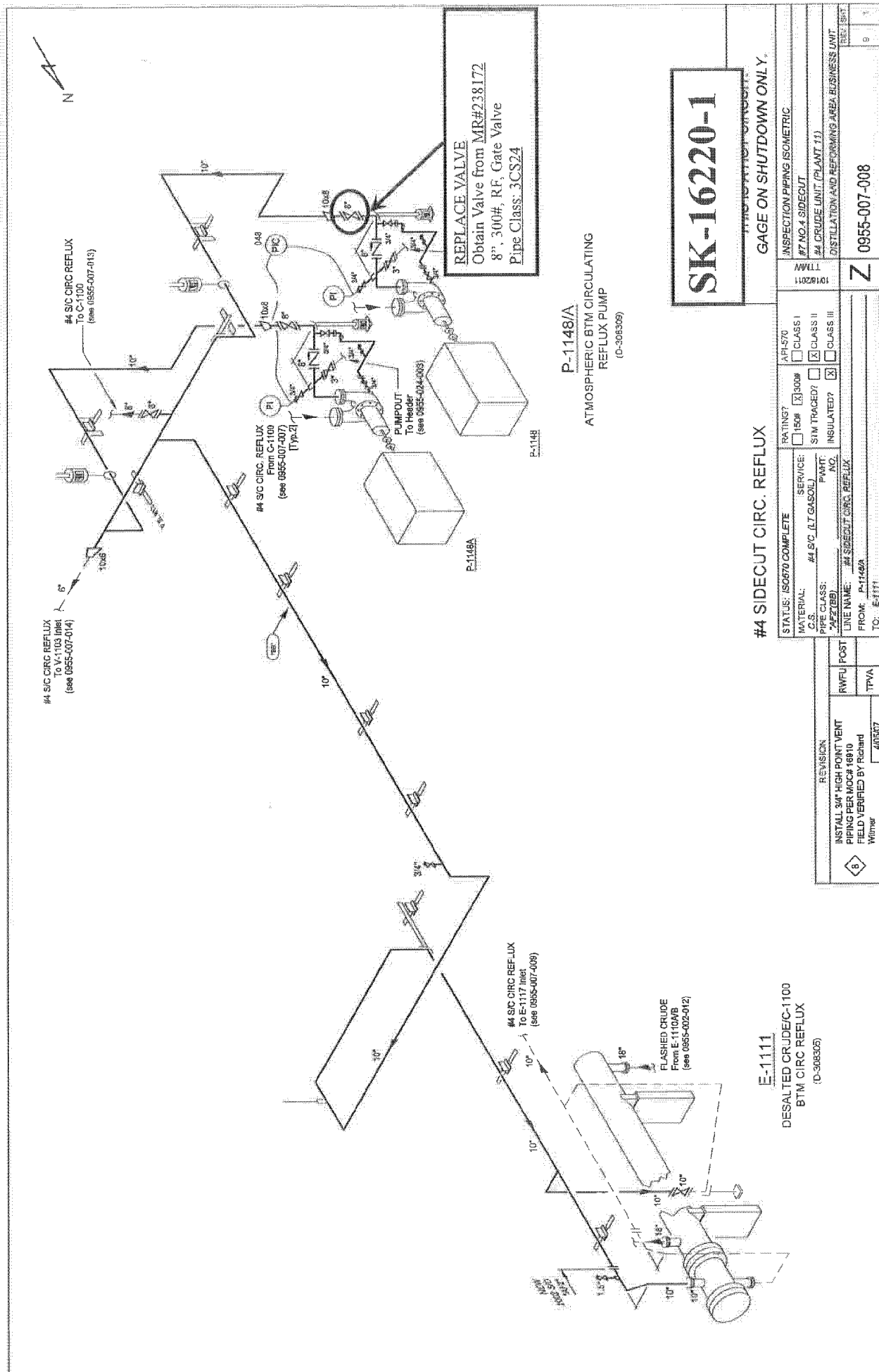
4.0 WORK INSTRUCTIONS

See SK-16220-1 for Work Instructions

5.0 ATTACHMENTS

	<u>Dwg No</u>	<u>Sheets</u>
• <u>Individual Valve Sketches</u>	SK-16220-1	1
• <u>Piping Classification:</u>	3CS24	3

Think Before You Act!



SERVICE: Process
 RATING CLASS: 300 RF, ASME B16.5-2009
 TEMPERATURE LIMIT: Min. to 750F
 NOMINAL CORROSION ALLOWANCE: 0.125 in. (0.100 in. MIN)
 VALVE TRIM: API Trim #8 (13CR & HF)

LIMITED BY: Flanges
 MATERIAL: Carbon Steel
 DESIGN CODE: ASME B31.3-2008
 STRESS RELIEF: NONE
 EXAMINATION: 5% RT, PT & Visual

*LIMITATIONS: Pressure limits for steels in hydrogen service. See Note 302.

PRESSURE - TEMPERATURE RATINGS			NOTE: HYDROTEST @ AMBIENT = 1125 psig					
TEMP F	Min. to 100	200	300	400	500	600	700	750
psig	740	675	655	635	600 (280)*	550 (65)*	535 (50)*	505 (50)*
TEMP C	Min. to 38	93	149	204	260	316	371	399
kPag	5100	4655	4515	4380	4135	3795	3690	3480

For NPS 3/4 through NPS 24 (Full flange ratings per ASME B16.5, Table 2-1.1.)

MINIMUM TEMPERATURE (see Note 300)				
SIZE:	3/4" - 16"	18"	20"	24"
°F:	-20	-7	-2	+9
°C:	-29	-21	-19	-12

ITEM	NOTES	NPS	SCH/RAT	ENDS	DESCRIPTION	ITEM CODE
PIPE	20					
		3/4 - 1-1/2	160	PE	CS, SMLS, ASTM A106-B	L11LA1B
		2 - 3	XS	BE	CS, SMLS, ASTM A106-B	L11NA2A
		4 - 10	STD WT	BE	CS, SMLS, ASTM A106-B	L11MA2A
		12 - 24	40	BE	CS, SMLS, ASTM A106-B	L11EA2A
NIPPLES	03, 20					
Branch		3/4 - 1-1/2	160	PE	CS, SMLS, ASTM A106-B	L34LAEJ
Branch		3/4 - 1-1/2	XXS	TOE-POE	CS, SMLS, ASTM A106-B	L34PAIJ
Swage (CONC)		3/4 - 1-1/2	160	BBE	CS, ASTM A234-WPB-S, MSS SP-95	L55LA1VA
Swage (CONC)		3/4 - 1-1/2	XXS	BLE-TSE	CS, ASTM A234-WPB-S, MSS SP-95	L35PBMQ
FITTINGS						
Socketolet		3/4 - 1-1/2	Class 6000	SW	CS, ASTM A105, MSS SP-97	L36VBDT
Thredolet	03	3/4 - 1-1/2	Class 6000	THRD	CS, ASTM A105, MSS SP-97	L36VBAT
SW Elbolet		3/4 - 1-1/2	Class 6000	SW	CS, ASTM A105	L36VBDO
Latrolet	92	3/4 - 1-1/2	160	Weld	CS, ASTM A105	L56LA1K
Weldolet	05	3/4 - 1-1/2	160	Weld	CS, ASTM A105, MSS SP-97	L56LA1H
90 ELL		3/4 - 1-1/2	Class 6000	SW	CS, ASTM A105, ASME B16.11	L30VBDB
45 ELL		3/4 - 1-1/2	Class 6000	SW	CS, ASTM A105, ASME B16.11	L30VBDA
Tee		3/4 - 1-1/2	Class 6000	SW	CS, ASTM A105, ASME B16.11	L31VBD
Tee	03	3/4 - 1-1/2	Class 6000	THRD	CS, ASTM A105, ASME B16.11	L31VBA
Tee (RED)		3/4 - 1-1/2	Class 6000	SW	CS, ASTM A105, ASME B16.11	L31VBDD
Plug	03	3/4 - 1-1/2		THRD	CS, ASTM A105, round head, ASME B16.11	L370ABW
Plug		3/4 - 1-1/2		PE	CS, ASTM A105, round head, ASME B16.11	L370AEW
Coupling		3/4 - 1-1/2	Class 6000	SW	CS, ASTM A105, ASME B16.11	L34VBDB
Cap		3/4 - 1-1/2	Class 6000	SW	CS, ASTM A105, ASME B16.11	L37VBDO
Reducer (CONC)		2 - 3	XS	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L55NA1DA
Reducer (ECC)		2 - 3	XS	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L55NA1DB
Weldolet	05	2 - 3	XS	Weld	CS, ASTM A105, MSS SP-97	L56NA1H
90 LR ELL		2 - 3	XS	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L50NA1BC
45 LR ELL		2 - 3	XS	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L50NA1AC
Tee		2 - 3	XS	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L51NA1
Tee (RED)		2 - 3	XS	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L51NA1D
Cap		2 - 3	XS	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L57NA1R
Reducer (CONC)		4 - 10	STD WT	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L55MA1DA
Reducer (ECC)		4 - 10	STD WT	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L55MA1DB
Weldolet	05	4 - 8	STD WT	Weld	CS, ASTM A105, MSS SP-97	L56MA1H
90 LR ELL		4 - 10	STD WT	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L50MA1BC
45 LR ELL		4 - 10	STD WT	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L50MA1AC
Tee		4 - 10	STD WT	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L51MA1
Tee (RED)		4 - 10	STD WT	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L51MA1D

ITEM	NOTES	NPS	SCH/RAT	ENDS	DESCRIPTION	ITEM CODE
Cap		4 - 10	STD WT	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L57MA1R
Reducer (CONC)		12 - 24	40	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L55EA1DA
Reducer (ECC)		12 - 24	40	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L55EA1DB
90 LR ELL		12 - 24	40	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L50EA1BC
45 LR ELL		12 - 24	40	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L50EA1AC
Tee		12 - 24	40	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L51EA1
Tee (RED)		12 - 24	40	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L51EA1D
Cap		12 - 24	40	Weld	CS, ASTM A234-WPB-S, ASME B16.9	L57EA1R
VALVES						
Gate	67	1/2 - 1/2	Class 800	MSW/FSW	CS body, API #8 trim, BB, RP, EXTD BDY	L20KAXHDM
Gate	15	3/4 - 1-1/2	Class 300	RF	CS body, API #8 trim, BB, RP	L20FA3DD
Gate	06	3/4 - 1-1/2	Class 800	T/SW	CS body, API #8 trim, BB, RP	L20KA7DD
Gate		3/4 - 1-1/2	Class 800	SW	CS body, API #8 trim, BB, RP	L20KA1DD
Gate	325	3/4 - 1-1/2	Class 800	SW	CS body, API #8 trim, BB, FP	L20KA1DD
Gate	161	3/4 - 1-1/2	Class 800	T/SW	CS body, API #8 trim, BELLOW SEAL, BB, RP	L20KA7DDL
Gate	161	3/4 - 1-1/2	Class 800	SW	CS body, API #8 trim, BELLOW SEAL, BB, RP	L20KA1DDL
Gate	161,325	3/4 - 1-1/2	Class 800	SW	CS body, API #8 trim, BELLOW SEAL, BB, FP	L20KA1DDL
Gate	06	3/4 - 1-1/2	Class 800	MSW/FNPT	CS body, API #8 trim, BB, RP, EXTD BDY	L20KAYHDM
Gate		2 - 6	Class 300	RF	CS body, API #8 trim, BB, FP	L20FA3DD
Gate		8 - 24	Class 300	RF	CS body, API #8 trim, BB, FP, GO	L20FA3DDF
Globe	161, 307	3/4 - 1-1/2	Class 800	SW	CS body, API #8 trim, BELLOW SEAL, WB	L21KA1JEL
Globe	307	3/4 - 1-1/2	Class 800	SW	CS body, API #8 trim, BB	L21KA1DE
Globe	307	2 - 2	Class 300	RF	CS body, API #8 trim, BB	L21FA3DE
Globe	307	3 - 8	Class 300	RF	CS body, API #8 trim, BB, GO	L21FA3DEB
Check	61,328	3/4 - 1-1/2	Class 800	SW	CS body, API #8 trim, BC, piston, HORIZ	L22KA1TEF
Check	62,328	2 - 24	Class 300	RF	CS body, API #8 trim, BC, Swing	L22FA3PE
Check	62,328	2 - 24	Class 300	RF	CS body, API #8 trim, Dual Plate	L22FA3LEH
Ball	26, 101, 164	2 - 12	Class 300	RF	CS, body T3 MOD, Orbit H8 seat	L25FB3FD
Ball	26, 63, 101	2 - 12	Class 300	RF	CS, body T3 MOD, Orbit H seat	L25FB3FF
Butterfly	101	2 - 24	Class 300	RF	CS body, 316 SS trim, Flg, Triple Offset GO	L26FA3TJM
FLANGES						
Socket Weld	02	3/4 - 1-1/2	Class 300	RF	CS, ASTM A105, ASME B16.5, 160 Bore	L40FA3BL
Blind		3/4 - 24	Class 300	RF	CS, ASTM A105, ASME B16.5	L43FA3
Blind Spectacle		3/4 - 14	Class 300	RF	CS, ASTM A516-70, ASME B16.48	L45FA3E
Spacer Ring		16 - 24	Class 300	RF	CS, ASTM A516-70, ASME B16.48	L45FA3FZ
Blind Plate		16 - 24	Class 300	RF	CS, ASTM A516-70, ASME B16.48	L45FA3GZ
Weld Neck		2 - 3	Class 300	RF	CS, ASTM A105, ASME B16.5, XS Bore	L40FA3DN
Weld Neck		4 - 10	Class 300	RF	CS, ASTM A105, ASME B16.5, STD WT Bore	L40FA3DM
Weld Neck		12 - 24	Class 300	RF	CS, ASTM A105, ASME B16.5, 40 Bore	L40FA3DE
Pair WN Orifice		2 - 3	Class 300	RF	CS, ASTM A105, ASME B16.36, 1/2 SW taps, XS Bore	L42FA3DNL
Pair WN Orifice		4 - 10	Class 300	RF	CS, ASTM A105, ASME B16.36, 1/2 SW taps, STD WT Bore	L42FA3DML
Pair WN Orifice	17	12 - 18	Class 300	RF	CS, ASTM A105, ASME B16.36, 1/2 SW taps, 40 Bore	L42FA3DEL
GASKETS						
		3/4 - 24	Class 300	RF	Spiral wound type 316L SS w/ flexible Inhibited Graphite filler, ASME B16.20, w/inner ring.	L61FF1CAC
	301	3/4 - 24	Class 300		KAM style, 316LSS w/APX-2 Graphite, EXH-SU-5151	L61FF1ZA
BOLTING						
Stud Bolts	310	3/4 - 24			ASTM A193, Gr B7 stud w/ 2 heavy hex nuts ASTM A194, Gr 2H	L620BM
Stud Bolts	311	3/4 - 24			ASTM A193, Gr B16 stud w/ 2 heavy hex nuts ASTM A194, Gr 7	L620CM

[illegible]

NOTES:

- November 2009